

# **Staff Evaluation To Address Cost of Compliance of Sanitary Sewer System Requirements**

**Division of Water Quality  
State Water Resources Control Board**

**January 21, 2014  
Board Meeting, Item #13**



# State Water Board Resolution 2013-0029

- Directs Water Board staff action on reducing cost of compliance while maintaining water quality protection
- Based on principles of 2011 Resource Realignment Resolution and corresponding 2012 Report

# State Water Board

## Resolution 2013-0029

- For Sanitary Sewer System requirements, the Board resolves to:
  1. Reduce frequency of reporting requirements when no threat to water quality
  2. Eliminate duplicative/overlapping sanitary sewer overflow requirements for dischargers subject to State and Regional Water Board Orders

# State Water Board

## Resolution 2013-0029

- Acknowledges 2013 amendment to Statewide Sanitary Sewer System Order Monitoring and Reporting Program
  - Streamlines spill reporting when no spills occur
- Directs staff to evaluate and recommend appropriateness of additional Regional Board requirements placed on Statewide Order enrollees

# Statewide General Order

## Statewide Sanitary Sewer Systems Waste Discharge Requirements – Order 2006-0003-DWQ

- Regulates public sanitary sewer systems greater than one mile
- Allows Regional Boards to place more stringent requirements to address region-specific water quality concerns

# Water Boards' Staff Evaluation

- Reviewed basin plans and Regional Water Board orders
- Evaluated the tangible water quality benefits resulting from additional monitoring and reporting requirements
- Discussed the value of the additional information resulting from additional requirements

# Staff Findings Regarding Basin Plans

- All basin plans contain prohibitions on sanitary sewer overflows
- Basin plan prohibitions are not a cost of compliance concern
  - Basin plan prohibitions do not directly result in unnecessary requirements and related compliance cost issues
  - It's how a Regional Water Board implements its basin plan through requirements in Orders that affect cost of compliance
- The Los Angeles and San Diego Water Boards implement their Basin Plan prohibitions through permits with additional requirements

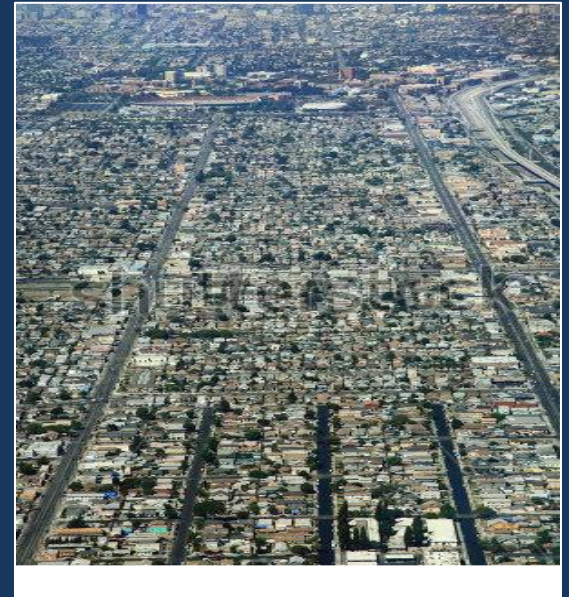
# Regional Boards with Additional Requirements in Orders

- San Francisco Bay Water Board
  - Individual NPDES permits for satellite collection systems connected to East Bay Municipal Utility District.
  - Per State Water Board Water Quality Order 2007-0004
- Central Coast Water Board
  - Scheduled to rescind two individual orders on sanitary sewer systems at January 30, 2014 Regional Board meeting
- Los Angeles Water Board and San Diego Water Boards
  - Orders that add monitoring and reporting



# Coastal Regional Concerns

- Dense urbanized impervious areas with extensive storm water systems
- Spills travel with higher velocities
- Spills threaten coastal tourism



## **Sewage spill closes Cameo Shores Beach in Orange County** Saturday, September 21, 2013

NEWPORT BEACH, Calif. -- A sewage spill has forced the closure of a stretch of Newport Beach's coastline to swimmers.

The closed area is Cameo Shores Beach near Milford Drive. Orange County health officials say a blocked sewage line leaked 1,000 gallons from a manhole into the storm drain on Friday. All but 250 gallons have been cleaned up. The area will remain closed until Sunday at the earliest.



# Los Angeles Water Board

- In NPDES permits issued to municipal wastewater facilities:
  - Regulates spills of 1,000 gallons or greater, or any volume reaching surface waters or shallow ground water
  - Requires 2-Hour notification to Health Dept. and Regional Board
  - Requires 24-Hour and 5-Day reports to Regional Water Board
  - Requires annual sewer overflow summary
    - If duplicate, Regional Board requesting courtesy copy
  - Requires water quality monitoring
    - For smaller spill threshold of 1,000 gallons to 50,000 gallons
    - Includes shallow ground water monitoring

# Los Angeles Water Board

- Region maintains all spill information in California Integrated Water Quality System (CIWQS)
- Information available for formal enforcement
- 2011 – 2013: Referrals to Attorney General for further enforcement:
  - Lack of appropriate local funding
  - Multiple Spills
  - Infrastructure Deficiencies
  - System Management Deficiencies

# Findings and Recommendations

## Additional Los Angeles Water Board Requirements

- Water Quality Monitoring
  - Spill threshold of 1,000 gallons vs. Statewide Order threshold of 50,000 gallons
  - Lower threshold directly related to coastal region dense urban development
  - Higher statewide threshold poses inability to regulate and enforce against direct impacts to public health and local tourism economy
  - Consider removal of spill monitoring (monitoring of sewage)
  - Maintain monitoring of receiving waters to determine impacts for enforcement

# Recommendations Regarding Additional Los Angeles Water Board Requirements

- Water Quality Monitoring of Shallow Ground Water
  - Retain requirement for spills to soils in close proximity to water bodies impacted by bacteria or areas of high recreational use
  - Remove requirement in other areas
  - Evaluate current information and phase in changes and to ensure public health not jeopardized

# San Diego Water Board General Order

- Adopted Order R9-2007-0005
- Includes additional notification and reporting requirements for all sanitary sewer systems:
  - Prohibits all sewer overflows
  - Requires 24-hour notification to Regional Board
  - Requires reporting of private lateral sewer overflows if Statewide Order enrollee becomes aware of them
- No fee required if enrollee is also enrolled under Statewide Order



# Staff Findings and Recommendations

## Additional San Diego Water Board Requirements

- Permit prohibits all sewer overflows
  - Keeps permit consistent with Basin Plan prohibition against sewage overflows to receiving waters
- Requires reporting of private lateral sewer overflows
  - Provides information on magnitude and trend of private lateral spill problem to help make regulatory decisions
  - Provides transparency to parties affected by private lateral spills including storm water agencies
  - Keep mandatory reporting as it minimizes the problem of under-reporting
- Remove 24-hour notification to Regional Water Board;  
Same info reported to centralized database

# Staff Overall Conclusions

1. Regional Water Boards want to make changes to address cost of compliance that do not compromise protecting water quality
2. Region-specific conditions warrant region-specific requirements
3. Regional Water Boards are implementing additional requirements to address region-specific concerns, as allowed by Statewide Order
4. There is a deterrent effect of reporting requirements that raises awareness and reduces spills
5. Duplicative reporting is not useful and should be removed
6. Some additional monitoring requirements are not necessary



# Staff Overall Recommendations

1. Keep additional requirements directly linked to region-specific public health concerns
2. Remove monitoring for overflows that do not pose public health threat
3. Remove monitoring that does not provide basis for follow-up actions to protect water quality
4. Remove all duplicative reporting that overlap Statewide Order requirements
5. Use data from statewide program and regional requirements for enforcement of spills and Water Boards' next steps

# Staff Recommendations

## For Next Statewide Order Update

1. Use San Diego Water Board data and other information for consideration of reporting requirements for larger private laterals overflows
2. Fine-tune monitoring and reporting requirements in Statewide Order per threat to water quality:
  - minimize requirements for minimal overflows to surface water (~95% of enrollees)
  - establish unique requirements to address larger sewer overflows to surface waters (~5% of enrollees)
3. Include in Order what is expected to be done with the data
4. Coordinate regulation with Division of Financial Assistance and Regional Boards to get systems causing spills fixed

Questions?

Additional Information If Needed

# LOS ANGELES WATER BOARD

## 1,000-9,999 Gallons Spilled 2007-2013

YEAR	NUMBER OF SANITARY SEWER OVERFLOWS	TOTAL OVERFLOW VOLUME (GALLONS)	SEWAGE VOLUME TO SURFACE WATER (GALLONS)
2007	38	103,015	83,289
2008	22	72,172	51,795
2009	18	73,500	64,958
2010	19	86,919	60,183
2011	12	65,906	47,466
2012	21	110,743	60,048
2013	38	180,819	121,160

# LOS ANGELES WATER BOARD

## 10,000-24,999 Gallons Spilled 2007-2013

YEAR	NUMBER OF SANITARY SEWER OVERFLOWS	TOTAL OVERFLOW VOLUME (GALLONS)	SEWAGE VOLUME TO SURFACE WATER (GALLONS)
2007	8	116,145	110,171
2008	3	46,000	42,850
2009	3	42,000	38,000
2010	2	41,750	33,000
2011	1	12,000	12,000
2012	0	0	0
2013	5	89,795	87,845

# LOS ANGELES WATER BOARD

## 25,000-49,999 Gallons Spilled 2007-2013

YEAR	NUMBER OF SANITARY SEWER OVERFLOWS	TOTAL OVERFLOW VOLUME (GALLONS)	SEWAGE VOLUME TO SURFACE WATER (GALLONS)
2007	1	49,950	49,950
2008	1	32,200	32,200
2009	0	0	0
2010	2	427,388	71,888
2011	0	0	0
2012	0	0	0
2013	0	0	0

# LOS ANGELES WATER BOARD

## Number of Sanitary Sewer Overflows

VOLUME RANGE (GALLONS)	NUMBER OF SANITARY SEWER OVERFLOWS
<1,000	3147
1,000-50,000	410
>50,000	15



# LOS ANGELES WATER BOARD

## Overflows Subject to Additional Requirements

- 20 Facilities subject to the additional requirements between 2007 - 2013.
- Number of overflows subject to additional requirements by volume range:

Volume Range (Gallons)	Number of Sewer Overflows
1,000-9,999	55
10,000-24,999	11
25,000-49,999	2
<b>Total</b>	<b>68</b>

- Percent Volume Recovered = ~50% (Statewide Ave. = 15%)
- Percent Volume Reaching Surface Water = ~50% (Statewide Ave. = 79%)
- Percent of Number of Overflows Reaching Surface Water = ~20% (Statewide Ave. = 16%)

# LOS ANGELES WATER BOARD

## Overflows Subject to Additional Requirements

	# of Facilities	# Overflows Reaching Surface Water per Volume Category			Total Sewer Overflow Numbers			
		1,000-9,999 Gal	10,000-24,999 Gal	25,000-49,999 Gal	Total # of SSOs	SSO Vol. (Gal)	SSO Vol. Recovered (Gal)	SSO Vol. Reach SW (Gal)
2007	8	20	7	0	27	164,110	21,650	142,355
2008	6	10	2	0	12	67,034	12,027	50,607
2009	5	5	0	0	5	26,200	822	25,378
2010	5	5	1	2	8	472,457	356,186	116,271
2011	3	4	0	0	4	28,300	4,190	21,410
2012	1	2	0	0	2	7,070	0	7,070
2013	5	9	1	0	10	50,564	8,785	38,779
2014	0	0	0	0	0	0	0	0
<b>Totals</b>		<b>55</b>	<b>11</b>	<b>2</b>	<b>68</b>	<b>815,735</b>	<b>403,660</b>	<b>401,870</b>